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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/533,926	05/04/2005	Hans-Rainer Hoffmann	512100-2046	8229

7590 05/28/2008

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EXAMINER	
ORWIG, KEVIN S	

ART UNIT	PAPER NUMBER
4161	

MAIL DATE	DELIVERY MODE
05/28/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/533,926	HOFFMANN ET AL.	
	Examiner	Art Unit	
	Kevin S. Orwig	4161	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *May 4, 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-11* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-11* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *5/4/05, 9/19/07, 2/11/08*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Status of the Claims

Claims 1-11 are currently pending and are the subject of this Office Action. This is the first Office Action on the merits of the claims.

Priority

The earliest effective U.S. filing date afforded the instantly claimed invention has been determined to be 10/17/2003, the filing date of the PCT application to which the instant national stage 371 application claims priority. Acknowledgment is made of applicant's claim to foreign priority under 35 U.S.C. 119(a)-(d). The certified copy of the German application, was filed with the USPTO on 05/04/2005.

Information Disclosure Statement

References lined-through on the information disclosure statement(s) were not considered because they were not provided in English (including the abstracts).

Claim Objections

Claims 1, 7, and 9 are objected to because of the following informalities: In claim 1, the word "planiplaniform" should be "planiform". In claim 7, the word "ebibatidine" should be "epibatidine". In claim 9, the word "buproprion" should be "bupropion". Appropriate correction is required.

Claim Rejections - 35 USC § 112 (1st Paragraph)

The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Written Description

1. Claims 5-10 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claims contain subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Specifically, the claims recite 'derivative' and 'derivatives' of the drugs listed in claims 5-10.

2. Regarding the requirement for adequate written description of chemical entities, Applicant's attention is directed to the MPEP §2163. In particular, *Regents of the University of California v. Eli Lilly & Co.*, 119 F.3d 1559, 1568 (Fed. Cir. 1997), *cert. denied*, 523 U.S. 1089, 118 S. Ct. 1548 (1998), holds that an adequate written description requires a precise definition, such as by structure, formula, chemical name, or physical properties, "not a mere wish or plan for obtaining the claimed chemical invention." *Eli Lilly*, 119 F.3d at 1566. The Federal Circuit has adopted the standard set forth in the Patent and Trademark Office (PTO) Guidelines for Examination of Patent Applications under the 35 U.S.C. 112.I "Written Description" Requirement ("Guidelines"), 66 Fed. Reg. 1099 (Jan. 5, 2001), which state that the written description requirement can be met by "showing that an invention is complete by disclosure of

sufficiently detailed, relevant identifying characteristics," including, *inter alia*, "functional characteristics when coupled with a known or disclosed correlation between function and structure..." *Enzo Biochem, Inc. v. Gen-Probe Inc.*, 296 F.3d 316, 1324-25 (Fed. Cir. 2002) (quoting Guidelines, 66 Fed. Reg. at 1106).

3. Applicants have failed to provide any reasonably specific description of the various derivative(s) as recited in the instant claims that would provide adequate written description of the compounds encompassed by the claims. Adequate written description requires a precise definition, such as by structure, formula, chemical name, or physical properties. In the present case, other than those specific agents recited in the claims, the disclosure fails to describe the claimed compounds in a manner that complies with the written description requirement of 35 U.S.C. 112, 1st Paragraph. The claims recite a genus of "active compounds" that is defined only by the fact that they are "active" and no definition is provided to limit this term or otherwise provide guidance as to the activity a compound must possess in order to be "active". There is insufficient written description of the claimed derivatives. Applicants provide no direction as to what subset of derivatives out of all possible derivatives that exist in the art would have been reasonably expected to be useful active compounds in the claimed dosage form. The particular compounds recited in the claims are not representative of the genus of derivatives encompassed by the claims, especially given that a derivative may not share any structural features of the recited starting compound from which it was derived.

Scope of Enablement

4. Claim 6 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claims contain subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Specifically, 7-azabicyclo(2.2.1)heptane and 7-azabicyclo(2.2.1)heptene are not active compounds as analgesics or nicotinic cholinergic receptor agonists. Therefore, one of ordinary skill in the art could not use the invention the invention as claimed. The specification, while being enabling for *some derivatives* of 7-azabicyclo(2.2.1)heptane and 7-azabicyclo(2.2.1)heptene, is not enabled for 7-azabicyclo(2.2.1)heptane and 7-azabicyclo(2.2.1)heptene themselves as active compounds in the claimed transmucosal administration form.

5. In this regard, the application disclosure and claims have been compared per the factors indicated in the decision *In re Wands*, 8 USPQ 2d 1400 (Fed. Cir., 1988) as to undue experimentation. The factors include:

1) the nature of the invention;

2) the scope or breadth of the claims;

3) the state of the prior art;

4) the predictability or unpredictability of the art;

5) the relative skill of those skilled in the art;

6) the presence or absence of working examples;

7) the amount of direction or guidance presented and,

8) the quantity of experimentation necessary.

The relevant factors are addressed below on the basis of comparison of the disclosure, the claims and the state of the prior art in the assessment of undue experimentation. Instant claim 6 recites the administration form of claim 1 wherein the active compound is 7-azabicyclo(2.2.1)heptane, 7-azabicyclo(2.2.1)heptene, and/or a derivative of this compound. While *some derivatives* of 7-azabicyclo(2.2.1)heptane and 7-azabicyclo(2.2.1)heptene are known to have pharmacologic activity as cholinergic, muscarinic, and/or nicotinic receptor ligands, the state of the art does not show evidence of these activities in the parent compounds themselves as they lack critical substituent(s), particularly at the R^2, R^3, R^5 and/or R^6 positions (See U.S. Patent No. 6,255,490 to Shen *et al.*, Issued Jul. 3, 2001; columns 3 and 4; Tables 5-8). Furthermore, substitution at these positions is relatively unpredictable as a simple replacement of a chlorine group with a methoxy group resulted in a 75 fold decrease in ED_{50} for analgesic activity (Shen *et al.*; Table 5). Thus, the level of skill in the art is high and is at least that of a medical doctor or Ph.D. scientist with several years of experience in synthetic organic chemistry and biological testing of neuro-active compounds. The instant disclosure provides no evidence or further guidance to support the use of either 7-azabicyclo(2.2.1)heptane or 7-azabicyclo(2.2.1)heptene as claimed in the transmucosal administration form. In view of these factors, and absent further evidence to the contrary, one of ordinary skill in the art would not be enabled to use, 7-azabicyclo(2.2.1)heptane or 7-azabicyclo(2.2.1)heptene as active compounds in the instantly claimed invention.

Claim Rejections - 35 USC § 112 (2nd Paragraph)

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 1-11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The terms "low", "rapid", and "relatively long period" in claim 1 are relative terms which render the claims indefinite. These terms are not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

7. While it is clear from the specification that the claimed invention is *intended* to be a sustained release form with "...*low* solubility..." and with "...release of active compound which is *rapid* and constant over a *relatively long period*..." (see paragraph [0015]), no data or even approximate values are provided for what these terms might mean.

8. Specifically, in regards to the phrase "relatively long period" in claim 1, it is acknowledged that a brief discussion of *dwell/disintegration* time is presented in paragraph [0006]. However, this discussion occurs in the context of a description of prior art, and it is not clear that it is intended to be used as a basis for the time period referenced in claim 1, which is a time of release of an active compound and may or may not be the same as a disintegration time. There is no evidence to suggest that the dwell/disintegration time is a direct correlation with the release of active compound,

particularly with long-lasting formulations, since the active compound may partition through the phosphatidylcholine fraction and enter the body via the transmucosal route in the absence of disintegration and/or formation of the lamellar mesophases discussed in paragraph [0022]. Thus, the time of release may be significantly shorter than the dwell/disintegration time.

9. Further, even if the discussion of paragraph [0006] were to be used as a basis for the time period referred to in claim 1, the phrase "relatively long period" would still not be clarified. The discussion in paragraph [0006] makes reference to *preferred* time periods: "...the disintegration time, is preferably in the range from 5 seconds to 1 minute...". Thus, one of ordinary skill in the art could reasonably construe a 'relatively long period' to be anytime greater than 5 seconds since the amount of time is not limited by this discussion. Since one of ordinary skill in the art could not be expected to make a reasonable distinction in the absence of further definitions and/or guidance in the specification, the metes and bounds of these claims are indefinite.

10. Claims 5-10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicants regard as the invention. Specifically, use of the terms "derivative" and "derivatives" in claims 5-10 renders them indefinite since the terms were not explicitly defined in the specification and no examples were given that might provide a basis for what is meant by these terms. In the absence of such information, one of ordinary skill in the art at the time the invention was made would not recognize the scope of these

claims. Thus, the metes and bounds of claims 5-10 are undefined. See MPEP § 2173.02.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

10. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

11. Claims 1-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zhang *et al.* (U.S. Patent No. 6,264,981; Issued July 24, 2001) (hereinafter Zhang *et al.*) in view of Patel *et al.* (U.S. Patent No. 6,248,363; Issued June 19, 2001) (hereinafter Patel *et al.*) and in further view of Weete *et al.* (U.S. Patent No. 5,703,255; Issued December 30, 1997) (hereinafter Weete *et al.*), by Stedman's Medical Dictionary

(Lippincott Williams & Wilkins, 2000; accessed online 5/13/08), and by Raisch *et al.* Ann. Pharmacother. 2002 February; 36(2):312-21 (hereinafter Raisch *et al.*).

Instant claim 1 recites:

"A planiform transmucosal pharmaceutical administration form which is distinguished by low solubility within the oral cavity and release of active compound which is rapid and constant over a relatively long period, characterized in that it is composed of a solid solution of the active compound

a) in a phosphatidylcholine fraction in which the fatty acid residues are at least 90% saturated, or

b) in a mixture of the phosphatidylcholine fraction specified under a) and a copolymer composed of maleic acid and an alkyl vinyl ether, and... [other optional elements]"

12. Zhang *et al.* disclose an oral transmucosal drug formulation comprising a pharmaceutical agent in solid solution with a dissolution agent (abstract; column 5, lines 40-51; column 6, lines 31-33) and disclose lecithin as one of the acceptable dissolution agents (column 7, line 29). It is noted that the meaning of "planiform" is synonymous with "having a flat or flattened shape". Zhang *et al.* disclose that the dosage form may take the form of, *inter alia*, a tablet, lozenge, or buccal or mucosal patch (column 5, lines 48-51), any one of which can have a flat or flattened shape and is therefore "planiform". It is further noted that lecithin is commonly accepted to consist almost entirely of phosphatidylcholine and is defined by Stedman's Medical Dictionary to consist of " 3-sn-phosphatidylcholines, phospholipids that on hydrolysis yield two fatty acid molecules and a molecule each of glycerophosphoric acid and choline" (i.e. phosphatidylcholine). Thus the lecithin dissolution agent of Zhang *et al.* reads on the phosphatidylcholine fraction of the instant application. Zhang *et al.* further disclose that the dosage form can be used to control the rate of dissolution (i.e. solubility as set forth in the specification of Zhang *et al.*) (column 5, lines 31-35; column 8, lines 12-17 and 56-62). Zhang *et al.* do

not explicitly teach that the phosphatidyl choline dissolution agent (i.e. phosphatidylcholine fraction) of instant claim 1 contains fatty acid residues that are at least 90% saturated. However, Patel *et al.* disclose solid pharmaceutical compositions formulated for oral or transmucosal use (column 41, lines 51-54) in the form of, *inter alia*, tablets, wafers, buccal or sublingual solids, films, and strips (column 41, lines 39-54) containing phosphatidylcholine or *hydrogenated* lecithins (column 31, lines 23, and 59-60). It is noted that commonly used hydrogenation methods typically result in quantitative saturation (i.e. 99-100% conversion of unsaturated fatty acids to saturated fatty acids) as evidenced by Weete *et al.* with phosphatidylcholine (example 2). In view of Weete *et al.* it is clear that the hydrogenated lecithins of Patel *et al.* are at least 90% saturated. Since Patel *et al.* disclose that hydrogenated lecithin is a suitable component for use in oral transmucosal delivery forms, it would have been *prima facie* obvious to one of ordinary skill in the art at the time of the invention to substitute one known surfactant (e.g. hydrogenated lecithin) for another in the dosage form of Zhang *et al.*, thus reading on instant claim 1.

13. Instant claim 2 recites the phosphatidylcholine fraction of claim 1 wherein said fraction comprises at least 80% by weight. As discussed above, Patel *et al.* disclose hydrogenated lecithin as a suitable surfactant for use in a solid oral transmucosal dosage form. Patel *et al.* further provide examples of dosage forms where the lipid fraction comprises 80% or greater by weight of the composition (examples 16, 17, 21, and 26). While these examples do not explicitly illustrate hydrogenated lecithin as the lipid fraction, hydrogenated lecithin is clearly suitable as the lipid fraction as disclosed in

the specification (as discussed above). Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to substitute hydrogenated lecithin for the lipid fractions named in any one of these examples at a range of 80% by weight or greater to produce a dosage form with the desired properties.

14. Instant claim 3 recites the administration form of claim 1 comprising polyvinylpyrrolidone as an additive. Patel *et al.* disclose a variety of functionally equivalent solubilizers (i.e. additives) including polyvinylpyrrolidone (column 37, lines 49-50), thus reading on claim 3. Based on the reasoning applied above for instant claim 1, it would have been *prima facie* obvious to one of ordinary skill in the art at the time of the invention to include a known additive for one oral transmucosal dosage form in another to produce a dosage form with the desired properties.

15. Instant claim 4 recites the administration form of claim 1 wherein the active compound is suitable for treating dependence (i.e. addiction) on addiction-inducing drugs. Zhang *et al.* teach that the pharmaceutical agent of their invention may be any drug substance used for, *inter alia*, prevention, control, or treatment of a condition. Zhang *et al.* further teach that the dosage form can be used with "a variety of drugs affecting the central nervous system" including naloxone (column 9, lines 39-53), which is well known to be useful in treating opioid addiction (see Raisch *et al.*, abstract). Thus, in view of Patel *et al.* per the discussion above, it would have been *prima facie* obvious to one of ordinary skill in the art at the time of the invention to include a drug to treat addiction (i.e. naloxone), reading on claim 4.

16. Instant claim 5 recites the administration form of claim 1 wherein the active compound is a fused indole derivative. As noted above (paragraph 10), there is an issue of indefiniteness with the language in this claim. While the meaning of 'derivative' in this claim is unclear, for the purpose of this rejection, the examiner construes this to mean any fused indole compound. Zhang *et al.* teach that the pharmaceutical agent of their invention may be any drug substance used for, *inter alia*, prevention, control, or treatment of a condition (column 6, lines 44-63). However, specific fused indole compounds are not disclosed. Patel *et al.* disclose the fused indole compound ergotamine as a suitable active ingredient in the oral transmucosal dosage form. Thus, it would have been *prima facie* obvious to one of ordinary skill in the art at the time of the invention to substitute one known oral transmucosal active agent (i.e. a fused indole compound) for another as the active compound in the invention of Zhang *et al.*

17. Claims 1, 6, and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zhang *et al.* in view of Patel *et al.* and in further view of Shen *et al.* (U.S. Patent No. 6,255,490; Issued July 3, 2001) (hereinafter Shen *et al.*)

18. Instant claim 6 recites the administration form of claim 1 wherein the active compound is 7-azabicyclo(2.2.1)heptane or 7-azabicyclo(2.2.1)heptene and/or a derivative of this compound. It is noted that there is an enablement issue with this claim regarding 7-azabicyclo(2.2.1)heptane or 7-azabicyclo(2.2.1)heptene (see paragraphs 4 and 5). It is further noted that there is an issue of indefiniteness with the language in this claim (see paragraph 10). Zhang *et al.* and Patel *et al.* teach the solid pharmaceutical administration form as discussed above (paragraph 12). Zhang *et al.*

further teach that the pharmaceutical agent of their invention may be any drug substance used for, *inter alia*, prevention, control, or treatment of a condition (column 6, lines 44-63). In particular, use of this dosage form with anti addiction agents is disclosed (column 6, lines 56 and 58). However, 7-azabicyclo(2.2.1)heptane or 7-azabicyclo(2.2.1)heptene and their derivatives are not explicitly disclosed. Shen *et al.* disclose *derivatives* of 7-azabicyclo(2.2.1)heptane and 7-azabicyclo(2.2.1)heptene, *some* of which are useful in the treatment of cognitive, neurological, and mental disorders and disorders characterized by altered cholinergic function (i.e. addiction) (column 7, lines 58-63). Thus, it would have been *prima facie* obvious to one of ordinary skill in the art at the time of the invention to substitute a known anti-addictive cholinergic receptor agonist (i.e. an appropriate *derivative* of 7-azabicyclo(2.2.1)heptane and 7-azabicyclo(2.2.1)heptene) as the active compound in the invention of Zhang *et al.*

19. Instant claim 7 recites the administration form of claim 1 wherein the active compound is ebibatidine. As noted above under 'Claim Objections' there appears to be a misspelling of "ebibatidine" and the examiner construes applicant to mean "epibatidine" for the purpose of this rejection. It is further noted that there is an issue of indefiniteness with the language in this claim (see paragraph 10). Zhang *et al.* and Patel *et al.* teach the solid pharmaceutical administration form as discussed above (paragraph 12). Zhang *et al.* further teach that the pharmaceutical agent of their invention may be any drug substance used for, *inter alia*, prevention, control, or treatment of a condition (column 6, lines 44-63). In particular, use of this dosage form with anti addiction agents is disclosed (column 6, lines 56 and 58). However,

epibatidine is not explicitly disclosed. Shen *et al.* disclose epibatidine in addition to a wide variety of similar compounds, some of which are useful in the treatment of cognitive, neurological, and mental disorders and disorders characterized by altered cholinergic function (i.e. addiction) (column 7, lines 58-63). Thus, it would have been *prima facie* obvious to one of ordinary skill in the art at the time of the invention to substitute a known anti-addictive cholinergic receptor agonist (i.e. epibatidine) as the active compound in the invention of Zhang *et al.*

20. Claims 1 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zhang *et al.* in view of Patel *et al.* and in further view of Meyer *et al.* (U.S. Patent No. 5,977,144; Issued November 2, 1999) (hereinafter Meyer *et al*

21. Instant claim 8 recites the administration form of claim 1 wherein the active compound is a benzylidene- and cinnamylidene-annabasiene. It is noted that there is an issue of indefiniteness with the language in this claim (see paragraph 10). Zhang *et al.* and Patel *et al.* teach the solid pharmaceutical administration form as discussed above (paragraph 12). Zhang *et al.* further teach that the pharmaceutical agent of their invention may be any drug substance used for, *inter alia*, prevention, control, or treatment of a condition (column 6, lines 44-63). In particular, use of this dosage form with anti addiction agents is disclosed (column 6, lines 56 and 58). However, benzylidene- and cinnamylidene-annabasienes are not explicitly disclosed. Meyer *et al.* disclose benzylidene- and cinnamylidene-annabasienes which are useful in the treatment of alcohol dependence and tobacco withdrawal (column 3, lines 49-60). Thus, it would have been *prima facie* obvious to one of ordinary skill in the art at the

time of the invention to substitute one known anti-addictive drug (i.e. a benzylidene- or cinnamylidene-annabasiene) for another as the active compound in the invention of Zhang *et al.*

22. Claims 1 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zhang *et al.* in view of Patel *et al.* and in further view of Cary (U.S. Patent No. 6,197,827; Issued March 6, 2001) (hereinafter Cary). Instant claim 9 recites the administration form of claim 1 wherein the active compound is selected from the group of mecamylamine, hypericin, CP-52655, and buproprion. As noted above under 'Claim Objections' there appears to be a misspelling of 'buproprion' and the examiner construes applicant to mean 'bupropion' for the purpose of this rejection. It is further noted that there is an issue of indefiniteness with the language in this claim (see paragraph 10). Zhang *et al.* and Patel *et al.* teach the solid pharmaceutical administration form as discussed above (paragraph 12). Zhang *et al.* further teach that the pharmaceutical agent of their invention may be any drug substance used for, *inter alia*, prevention, control, or treatment of a condition (column 6, lines 44-63). In particular, use of this dosage form with anti addiction agents is disclosed (column 6, lines 56 and 58). However, the compounds of instant claim 9 are not explicitly disclosed. Cary discloses both mecamylamine and bupropion as useful agents in smoking cessation therapy and treatment of cocaine addiction (abstract). Thus, it would have been *prima facie* obvious to one of ordinary skill in the art at the time of the invention to substitute one known anti-addictive drug (i.e. mecamylamine or bupropion) for another as the active compound in the invention of Zhang *et al.*

23. Claims 1 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zhang *et al.* in view of Patel *et al.* and in further view of Plotnikoff *et al.* (U.S. Patent No. 3,706,831; Issued December 19, 1972) (hereinafter Plotnikoff *et al.*).

24. Instant claim 10 recites the administration form of claim 1 wherein the active compound is selected from oxazolidinone derivatives and befloxatones. As noted above (paragraph 10), there is an issue of indefiniteness with the language in this claim. Zhang *et al.* and Patel *et al.* teach the solid pharmaceutical administration form as discussed above (paragraph 12). Zhang *et al.* further teach that the pharmaceutical agent of their invention may be any drug substance used for, *inter alia*, prevention, control, or treatment of a condition (column 6, lines 44-63). In particular, use of this dosage form with anti addiction agents is disclosed (column 6, lines 56 and 58). However, the compounds of instant claim 10 are not explicitly disclosed. Plotnikoff *et al.* disclose various oxazolidinones as useful agents in the treatment of drug addiction (abstract). Thus, it would have been *prima facie* obvious to one of ordinary skill in the art at the time of the invention to substitute one known anti-addictive drug (i.e. an oxazolidinone) for another as the active compound in the invention of Zhang *et al.*

25. Claims 1 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zhang *et al.* in view of Patel *et al.* and in further view of Serra *et al.* (Serra, S. *et al.* Eur. J. Pharmacol. 2001 November; 430(2-3):369-371) (hereinafter Serra *et al.*).

26. Instant claim 11 recites the administration form of claim 1 wherein the active compound is the cannabinoid receptor antagonist SR 141716. Zhang *et al.* and Patel *et al.* teach the solid pharmaceutical administration form as discussed above (paragraph

12). Zhang *et al.* further teach that the pharmaceutical agent of their invention may be any drug substance used for, *inter alia*, prevention, control, or treatment of a condition (column 6, lines 44-63). In particular, use of this dosage form with anti addiction agents is disclosed (column 6, lines 56 and 58). However, SR 141716 is not explicitly disclosed. Serra *et al.* teach that SR 141716 is useful in the treatment of alcohol addiction (abstract). Thus, it would have been *prima facie* obvious to one of ordinary skill in the art at the time of the invention to substitute one known anti-addictive drug (i.e. SR 141716) for another as the active compound in the invention of Zhang *et al.*

Conclusion

No claims are currently allowable.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin S. Orwig whose telephone number is (571)270-5869. The examiner can normally be reached Monday-Friday 8:00 am-5:00 pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Nolan can be reached Monday-Friday 8:00 am-5:00 pm at (571)272-0847. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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KSO

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